

Customer No.: 31561
Application No.: 10/065,091
Docket No.: 5486-US-PA

REMARKS

Present Status of the Application

This is a full and timely response to the outstanding non-final Office Action mailed on November 20, 2007. The Office Action has rejected claims 1-5, 7, 10-11, and 56-59 and 62 under 35 USC 103(a) as being unpatentable over Tanada et al. (Tanada hereinafter, US Publication 2002/0054257) in view of Nakai et al. (Nakai, hereinafter, U.S. Patent No. 6,144,429). The Office Action has also rejected claims 1-5, 7, 10-11, and 56-59 and 62 under 35 USC 103(a) as being unpatentable over Tanada in view of Ogawa et al. (Ogawa hereinafter, U.S. Patent No. 6,122,027) and further in view of Nakai.

In this response, claims 2, 7, 10 and 56 have been amended and claims 1, 3-5 have been cancelled. Upon entry of the amendments, claims 2, 7, 10, 11, 24-33, 44-59 and 62 remain pending. It is believed that no new matter is added by way of these amendments made to the claims or otherwise to the application.

After carefully considering the remarks set forth in this Office Action and the cited references, it is strongly believed that the cited references are deficient to adequately teach the claimed features as recited in the amended claims. The reasons that motivate the above position of the Applicants are discussed in detail hereafter, upon which reconsideration of the claims is most earnestly solicited.

The Office Action has rejected claims 1-5, 7, 10-11 and 56-59 under 35 U.S.C. 103(a), as being unpatentable over Tanada et al. (U.S. Publication No. 2002/0054257, hereafter Tanada) in view of Nakai et al. (US Patent 6,144,429, hereinafter Nakai).

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The Office Action has also rejected claims 1-5, 7, 10-11, and 56-59 and 62 under 35 USC 103(a) as being unpatentable over Tanada in view of Ogawa et al. (Ogawa hereinafter, U.S. Patent No. 6,122,027) and further in view of Nakai.

To establish a *prima facie* case of obviousness under 35 U.S.C § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. See MPEP § 2143.

The Office has failed to establish *prima facie* obviousness in rejecting independent Claim 56 because Tanada, Nakai and Ogawa, taken alone or combined, fail to teach or suggest, among other things, “*...a planar color filter layer over the conformal reflective layer, wherein the planar color filter layer has a substantially planar upper surface and fully covers the conformal reflective layer; and a first transparent conductive layer conformably over the planar color filter layer, wherein the first transparent conductive layer is connected to a thin film transistor for controlling the liquid crystal layer and the conformal reflective layer is electrically isolated from the first transparent conductive layer...*”.

The present invention teaches a planar color filter formed over the conformal reflective layer, and the planar color filter layer fully covers the conformal reflective layer.

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Accordingly, the present invention can provide a uniform cell gap. Tanaka, however, teaches a plurality of discrete color filters 13 that are spaced apart to partially cover the reflective film 12. Hence, unlike the instant case, the color filters 13 of Tanaka are incapable of providing a planar surface. If the electrode layer 15 is directly formed on the color filters 13 without the overcoat film 14 in-between, **the electrode layer 15 would be electrically connected to reflective film 12 and fail to operate due to circuit short through the reflective film 12.** Moreover, the present invention teaches a transparent conductive layer conformably over the planar color filter layer and the first transparent conductive layer is connected to a thin film transistor. Tanaka, on the other hand, simply teaches forming an overcoat film 14 over the discrete color filters 13 and the electrode layer 15 is not connected to a thin film transistor.

As previously discussed, Tanada teaches a passive LCD device which comprises a grid of conductors with pixels situated at each section within the grid and current is being delivered across two conductors on the grid to control the light for any pixel. Further, the passive device of Tanada does not operate through any TFT. Nakai, on the other hand, teaches an active matrix that includes a TFT located at each pixel intersection. Further, in order for Tanada to be combined with Nakai and for Tanada to connect to a TFT, a contact hole must be formed, for example, in the overcoat film 14, the reflection film 12, the color filters 13 and the organic film 11 of the passive LCD device of Tanada for exposing a TFT. Such a configuration would render Tanada's passive LCD device inoperable. Hence, the motivation to combine Tanada with Nakai is lacking. Additionally, similar to Tanaka, Nakai also fails to teach or suggest a planar color filter

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formed over the conformal reflective layer, and the planar color filter layer fully covers the conformal reflective layer.

With respect to Ogawa, the Office asserts that Ogawa teaches a display having color filters that do not comprise an overcoat layer. Hence, the overcoat layer of Tanada was known to be not essential and it would have been obvious to modify the invention of Tanada with color filters that do not comprise an over coat layer.

Ogawa, which is similar to Tanada, also teaches a plurality of discrete color filters 103a, b, c, d, e, f, rather than a planar color filter layer as in the invention, to partially cover the reflective film 102 thereunder. Further, similar to Tanada, Ogawa teaches the disposition of a protecting film on the plurality of discrete color filters. Hence, both Tanada and Ogawa require an overcoat film 14 or gate insulating film 133 to provide a planar surface, whereas the present invention teaches a planar color filter layer planarizing the bumpy reflective film directly. Accordingly, even if Ogawa is combined with Tanada and Nakai, the combination still fails to teach or suggest each and every element of claims 1 and 56. Since claims 1-5, 7, 10-11, 56-69 are dependent claims, which further define the invention recited in claims 1 and 56, Applicants respectfully assert that these claims also are in condition for allowance. Thus, reconsideration and withdrawal of this rejection are respectively requested.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 2, 7, 10, 11, 24-33, 44-59 and 62 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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